



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2020-0320; Project Identifier 2019-CE-011-AD; Amendment 39-21248; AD 2020-19-06]**

**RIN 2120-AA64**

**Airworthiness Directives; McCauley Propeller Systems**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain model McCauley Propeller Systems (McCauley) governors installed on airplanes. This AD was prompted by reports of an unapproved variant McCauley idler gear bearing, part number (P/N) A-20028, that could be installed in the affected governors. This AD requires replacing the governor with a governor that is eligible for installation. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact McCauley Propeller Systems, One Cessna Boulevard, P.O. Box 7704, Wichita, Kansas 67277; telephone: (800) 621-7767 or (316) 831-4021; email: [productsupport@txtav.com](mailto:productsupport@txtav.com);

internet: <https://mccauley.txtav.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0320.

### **Examining the AD Docket**

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0320; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Thomas Teplik, Aerospace Engineer, Wichita ACO Branch, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4196; fax: (316) 946-4107; email: [thomas.teplik@faa.gov](mailto:thomas.teplik@faa.gov) or [Wichita-COS@faa.gov](mailto:Wichita-COS@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain model McCauley Propeller Systems (McCauley) governors installed on airplanes. The NPRM published in the *Federal Register* on April 7, 2020 (85 FR 19399). The NPRM was prompted by reports from McCauley that an unapproved variant idler gear bearing, P/N A-20028, was installed on

certain governors during production between January 31, 2017, and September 27, 2018, and may have been installed on governors in service after January 31, 2017. The unapproved variant of the idler gear bearing does not conform to McCauley drawing requirements.

All models of McCauley governors have an idler gear bearing with P/N A-20028 installed; however, the unapproved variant of the bearing can be identified by part marking “BA 59.” The non-conforming idler gear bearing could have also been included in the idler gear assembly (idler gear and bearing), P/N A-20107, or the governor overhaul kit, P/N PL-20233 or PL-20234.

The non-conformity of the bearing may cause premature failure of the idler gear bearing. Early symptoms that the idler gear bearing may fail include inability of the governor to hold the selected RPM, hunting, surging, etc. An investigation identified 23 occurrences of airplane operation problems related to erratic governor behavior that may have resulted from the unapproved idler gear bearing.

The NPRM proposed to require replacing an affected governor with a governor eligible for installation. The FAA is issuing this AD to prevent failure of the idler gear bearing, which could result in failure of the governor, loss of propeller pitch control, engine and propeller over speed, engine oil contamination, and loss of airplane control.

### **Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA’s response to each comment.

### **Supportive Comments**

The Civil Aviation Safety Authority (CASA) of Australia, David Paynter, and Chartair Pty Ltd supported the NPRM.

### **Request to Clarify the Applicability**

CASA, David Paynter, and Chartair Pty Ltd requested the FAA clarify the applicability with respect to the idle gearing bearings affected by the unsafe condition.

CASA advised of similar incidents of premature failure in idler gear bearings identified by part marking "SCE 59" and asked whether the FAA has determined that the unsafe condition exists or can develop in idler gear bearings other than those identified with "BA 59." David Paynter expressed concern with governors that have "SCE 59" bearings or bearings with "BA 59" that do not have any country of origin stamped on them. Chartair Pty Ltd stated it has experienced bearing failures outside of the range identified in the NPRM. David Paynter and Chartair Pty Ltd requested the FAA change the AD to include these additional bearings.

The FAA disagrees. The A-20028 bearing identified with "BA 59" is an unapproved bearing that does not conform to McCauley drawing requirements. Although the FAA is aware of failures of bearings other than those stamped with "BA 59", these bearings do not demonstrate the same unsafe condition as identified in this AD. The FAA will continue to monitor McCauley governor field reports for issues involving bearings other than those stamped with "BA 59".

The FAA did not make changes to this AD as a result of these comments.

### **Request to Clarify the Required Actions**

The Aircraft Owners and Pilots Association (AOPA) requested the FAA clarify paragraph (f), Compliance, of the NPRM. AOPA stated that the proposed language in paragraph (f) of the proposed AD to replace the governor with a governor eligible for installation can be misleading and imply that the governor must be replaced with a new or overhauled governor regardless of the status of the existing governor.

The FAA disagrees. Paragraph (f) of this AD requires compliance, unless already done. Thus, the AD allows operators to take credit for replacing the governor with a governor eligible for installation if done before the effective date of the AD. If the existing governor does not have an idler gear bearing with a part marking “BA 59”, then compliance is already done.

No changes to this AD are necessary based on this comment.

#### **Request to Clarify the Installation Prohibition**

AOPA requested the FAA clarify the wording in paragraph (h), Parts Installation Prohibition, of the NPRM. AOPA stated the language does not convey whether replacing the affected idle gear bearing in the governor terminates the AD.

The FAA disagrees. This AD does not require repetitive actions; therefore, terminating action is inappropriate. The installation prohibition ensures that affected governors will not be replaced with a part that has the unsafe condition. Once the affected governor is replaced in accordance with the requirements of this AD, no further action is required. The FAA did not make changes to this AD as a result of this comment.

#### **Conclusion**

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously. The FAA has determined that these changes:

- Are consistent with the proposal in the NPRM for addressing the unsafe condition; and
- Do not add any burden upon the public than was already proposed in the NPRM.

## **Related Service Information under 1 CFR part 51**

The FAA reviewed McCauley Alert Service Bulletin No. ASB273C, dated January 30, 2019. The service bulletin contains model and serial number information to identify the affected governors. The service bulletin also contains procedures for removing the governor from the engine, inspecting the governor for the unapproved variant idler gear bearing, replacing the idler gear bearing or idler gear assembly if necessary, overhauling the governor if necessary, and installing a governor on the engine. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Costs of Compliance**

The FAA estimates that this AD affects 2,500 governors as installed in airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

### **Estimated Costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Remove affected governor	1 work-hour X \$85 per hour = \$85	Not Applicable	\$85	\$212,500
Install a governor	1 work-hour X \$85 per hour = \$85	See table below	Variable	Unknown

An operator has the option to pay a service center to inspect their existing governor and replace the idler gear bearing if necessary or pay to have their existing governor overhauled. An operator has the option to purchase a factory new governor or an overhauled governor, a feathering/syncing governor or a non-feathering/syncing governor. The FAA has no way of knowing what option an operator may take to obtain a

governor eligible for installation. Therefore, the FAA has no way of determining the parts cost on U.S. operators. The following represents the estimated parts cost associated with obtaining a governor.

#### **Cost for an Eligible Governor**

<b>Type of Governor</b>	<b>Cost of Governor</b>
Factory new non-feathering/non-syncing governor	\$2,000
Factory new feathering/syncing governor	\$9,000
Overhaul of existing non-feathering/non-syncing governor	\$1,000
Overhaul of existing feathering/syncing governor	\$3,000

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all costs in this cost estimate.

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2020-19-06 **McCauley Propeller Systems**: Amendment 39-21248; Docket No. FAA-2020-0320; Project Identifier 2019-CE-011-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].



**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the McCauley Propeller Systems (McCauley) governors specified in paragraph (c)(1) or (2) of this AD and installed on airplanes, certificated in any category.

(1) Models listed in table 2 of McCauley Alert Service Bulletin No. ASB273C, dated January 30, 2019 (McCauley ASB273C) with a serial number from 170061 through 180501, excluding the serial numbers listed in table 1 of McCauley ASB273C; or

(2) Models listed in table 2 of McCauley ASB273C, with any serial number, that have an installation date after January 31, 2017, or an installation date that cannot be determined.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 61, Propellers.

**(e) Unsafe Condition**

This AD was prompted by reports of an unapproved variant idler gear bearing, McCauley part number (P/N) A-20028, installed on governors. All models of McCauley governors have a bearing with P/N A-20028 installed; however, the unapproved variant can be identified with the part marking “BA 59.” The FAA is issuing this AD to prevent failure of the idler gear bearing. This failure could result in failure of the governor, loss of propeller pitch control, engine and propeller over speed, engine oil contamination, and loss of control of the airplane.

**(f) Compliance**

Unless already done, within 50 hours time-in-service after the effective date of this AD or within 24 months after the effective date of this AD, whichever occurs first, replace the governor with a governor eligible for installation.

Note 1 to paragraph (f) of this AD: Any model McCauley governor that is stamped with the letter B, as specified in the Accomplishment Instructions in McCauley ASB273C, has already complied with the requirements of this AD.

**(g) Definition**

For the purposes of this AD, a governor eligible for installation is defined as a governor that does not have an idler gear bearing with a part marking “BA 59” installed.

**(h) Parts Installation Prohibition**

As of the effective date of this AD, do not install on any airplane a McCauley governor unless it is a governor eligible for installation.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Wichita ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

For more information about this AD, contact Thomas Teplik, Aerospace Engineer, Wichita ACO Branch, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4196; fax: (316) 946-4107; email: [thomas.teplik@faa.gov](mailto:thomas.teplik@faa.gov) or [Wichita-COS@faa.gov](mailto:Wichita-COS@faa.gov).

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) McCauley Alert Service Bulletin No. ASB273C, dated January 30, 2019.

(ii) [Reserved]

(3) For McCauley Propeller Systems service information identified in this AD, contact McCauley Propeller Systems, One Cessna Boulevard, P.O. Box 7704, Wichita, Kansas 67277; telephone: (800) 621-7767 or (316) 831-4021; email: [productsupport@txtav.com](mailto:productsupport@txtav.com); internet: <https://mccauley.txtav.com>.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on September 4, 2020.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2020-21440 Filed: 9/28/2020 8:45 am; Publication Date: 9/29/2020]